and consider the following remarks.

In The Claims:

1. (currently amended) A pulse width modulator, adapted to receive a feedback voltage and a reference voltage, the pulse width modulator comprising:

an amplitude-adjustable triangle-wave generator, adapted to perform an amplitude operation according to the reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal; and

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal.

2. (original) The pulse width modulator of claim 1, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

3. (original) The pulse width modulator of claim 1, wherein when a difference between the feedback voltage and the reference voltage is lower than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

4. (original) The pulse width modulator of claim 1, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.

5. (currently amended) A loading system, coupled to a power terminal, the loading system comprising:

a boosting circuit having an input terminal, coupled to the power terminal for selectively receiving an operational voltage therefrom, and an output terminal;

a pulse width modulator, coupled to the output terminal of the boosting circuit, comprising:

an amplitude-adjustable triangle-wave generator, adapted to receive a feedback voltage from the boosting circuit and to perform an amplitude operation according to a reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal;

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal; and

a switch having a first terminal, coupled to the driving circuit, a second terminal coupled to the power terminal, and a third terminal coupled to a ground terminal, the turning on or turning off of the switch depends on the driving signal.

6. (original) The loading system of claim 5, wherein when the switch is turned off, the power terminal applies the operational voltage to the boosting circuit; when the switch is turned on, the power terminal does not apply the operational voltage to the boosting circuit.

7. (original) The loading system of claim 5, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

8. (original) The loading system of claim 5, wherein when a difference between the feedback voltage and the reference voltage is lower than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

9. (original) The loading system of claim 5, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.

10. (currently amended) A loading system, coupled to a power terminal, the loading system comprising:

a buck circuit, having an input terminal coupled to the power terminal for selectively receiving an operational voltage therefrom, and an output terminal;

a pulse width modulator, coupled to the output terminal of the buck circuit, comprising:

an amplitude-adjustable triangle-wave generator, adapted to receive a feedback voltage from the buck circuit and to perform an

amplitude operation according to a reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal;

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal; and

a switch, having a first terminal coupled to the driving circuit, a second terminal coupled to the power terminal, and a third terminal coupled to a ground terminal, the turning on or turning off of the switch depends on the driving signal.

11. (original) The loading system of claim 10, wherein when the switch is turned off, the power terminal applies the operational voltage to the boosting buck circuit; when the switch is turned on, the power terminal does not apply the operational voltage to the boosting buck circuit.

12. (original) The loading system of claim 10, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

13. (original) The loading system of claim 10, wherein when a difference between the feedback voltage and the reference voltage is lower than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

14. (original) The loading system of claim 10, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the

amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.

15. (currently amended) A loading system coupled to a power terminal, the loading system comprising:

a push-pull circuit, having an input and an output terminal, the output terminal outputting a feedback voltage;

a pulse width modulator, coupled to the output terminal of the push-pull circuit, comprising:

an amplitude-adjustable triangle-wave generator, adapted to receive the feedback voltage from the push-pull circuit and to perform an amplitude operation according to a reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the

amplitude-adjustable triangle wave for outputting a pulse controlling signal;

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal; and

a switch, having a first terminal coupled to the driving circuit, a second terminal coupled to the power terminal, and a third terminal coupled to a ground terminal, the turning on or turning off of the switch depends on the driving signal.

16. (original) The loading system of claim 15, wherein the push-pull circuit generates an induced current when the switch is turned on.

17. (original) The loading system of claim 15, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

18. (original) The loading system of claim 15, wherein when a difference between the feedback voltage and the reference voltage is lower than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

19. (original) The loading system of claim 15, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.

20. (currently amended) A loading system coupled to a power terminal, the loading system comprising:

a full-bridge circuit, having an input and an output terminal, the output terminal outputting a feedback voltage;

a pulse width modulator, coupled to the output terminal of the full-bridge circuit, comprising:

an amplitude-adjustable triangle-wave generator, adapted to receive the feedback voltage from the full-bridge circuit and to perform an amplitude operation according to a reference voltage

and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal;

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal; and

a switch, having a first terminal coupled to the driving circuit, a second terminal coupled to the power terminal, and a third terminal coupled to a ground terminal, the turning on or turning off of the switch depends on the driving signal.

21. (original) The loading system of claim 20, wherein the full-bridge circuit generates an induced current when the switch is turned on.

22. (original) The loading system of claim 20, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

23. (original) The loading system of claim 20, wherein when a difference between the feedback voltage and the reference voltage is lower than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

24. (original) The loading system of claim 20, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.

25. (currently amended) A loading system coupled to a power terminal, the loading system comprising:

a half-bridge circuit, having an input and an output terminal, the output terminal outputting a feedback voltage;

a pulse width modulator, coupled to the output terminal of the half-bridge circuit, comprising:

an amplitude-adjustable triangle-wave generator, adapted to receive the feedback voltage from the half-bridge circuit and to perform an amplitude operation according to a reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage;

an error signal generator, adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal;

a pulse signal generator, coupled to the amplitude-adjustable triangle-wave generator and the error signal generator, adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal;

a driving circuit, coupled to the pulse signal generator, adapted to receive and transform the pulse generating signal for outputting a driving signal; and

a switch, having a first terminal coupled to the driving circuit, a second terminal coupled to the power terminal, and a third terminal coupled to a ground terminal, the turning on or turning off of the switch depends on the driving signal.

26. (original) The loading system of claim 25, wherein the full-bridge circuit generates an induced current when the switch is turned on.

27. (original) The loading system of claim 25, wherein when a difference between the feedback voltage and the reference voltage is higher than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a first amplitude of the amplitude-adjustable triangle wave.

28. (original) The loading system of claim 25, wherein when a difference between the feedback voltage and the reference voltage is lower

than a transient voltage, the amplitude-adjustable triangle-wave generator outputs a progressive second amplitude of the amplitude-adjustable triangle wave.

29. (original) The loading system of claim 25, wherein when the feedback voltage is higher than, or equal to, the reference voltage, the amplitude-adjustable triangle-wave generator outputs a third amplitude of the amplitude-adjustable triangle wave.